

BBBBBBBBBBBBBBB      AAAAAAAA      CCCCCCCCCCCCCC      KKK      KKK      UUU      UUU      PPPPPPPPPPPPPP  
BBBBBBBBBBBBBBB      AAAAAAAA      CCCCCCCCCCCCCC      KKK      KKK      UUU      UUU      PPPPPPPPPPPPPP  
BBBBBBBBBBBBBBB      AAAAAAAA      CCCCCCCCCCCCCC      KKK      KKK      UUU      UUU      PPPPPPPPPPPPPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP      PPP  
BBBBBBBBBBBBBBB      AAA      AAA      CCC      KKKKKKKKK      UUU      UUU      PPPPPPPPPPPPPP  
BBBBBBBBBBBBBBB      AAA      AAA      CCC      KKKKKKKKK      UUU      UUU      PPPPPPPPPPPPPP  
BBBBBBBBBBBBBBB      AAA      AAA      CCC      KKKKKKKKK      UUU      UUU      PPPPPPPPPPPPPP  
BBB      BBB      AAAAAAAAAAAAAA      CCC      KKK      KKK      UUU      UUU      PPP  
BBB      BBB      AAAAAAAAAAAAAA      CCC      KKK      KKK      UUU      UUU      PPP  
BBB      BBB      AAAAAAAAAAAAAA      CCC      KKK      KKK      UUU      UUU      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP  
BBB      BBB      AAA      AAA      CCC      KKK      KKK      UUU      UUU      PPP  
BBBBBBBBBBBBBBB      AAA      AAA      CCCCCCCCCCCCCC      KKK      KKK      UUUUUUUUUUUUUUUU      PPP  
BBBBBBBBBBBBBBB      AAA      AAA      CCCCCCCCCCCCCC      KKK      KKK      UUUUUUUUUUUUUUUU      PPP  
BBBBBBBBBBBBBBB      AAA      AAA      CCCCCCCCCCCCCC      KKK      KKK      UUUUUUUUUUUUUUUU      PPP

\*\*FILE\*\* ID\*\*LISTJOUR

J 1

```
1 0001 0 MODULE LISTJOUR (%TITLE 'List a journal file'
2 0002 0 IDENT = 'V04-000'
3 0003 0 ) =
4 0004 1 BEGIN
5 0005 1
6 0006 1 ****
7 0007 1 ****
8 0008 1 *
9 0009 1 * COPYRIGHT (c) 1978, 1980, 1982, 1984 BY
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25 0025 1 * SOFTWARE ON EQUIPMENT WHICH IS NOT SUPPLIED BY DIGITAL.
26 0026 1 *
27 0027 1 *
28 0028 1 ****
29 0029 1 *
30 0030 1 *
31 0031 1 ++
32 0032 1 * FACILITY:
33 0033 1 * Backup/Restore
34 0034 1 *
35 0035 1 ++
36 0036 1 * ABSTRACT:
37 0037 1 * This module contains the routines that list a journal file.
38 0038 1 *
39 0039 1 * ENVIRONMENT:
40 0040 1 * VAX/VMS user mode.
41 0041 1 --
42 0042 1 * AUTHOR: M. Jack, CREATION DATE: 10-Apr-1981
43 0043 1 *
44 0044 1 * MODIFIED BY:
45 0045 1 *
46 0046 1 * V03-003 LY0490 Larry Yetto 21-MAY-1984 16:12
47 0047 1 * Modify code to allow long directory names to be output.
48 0048 1 *
49 0049 1 * V03-002 LY0464 Larry Yetto 1-FEB-1984 10:39
50 0050 1 * Add support for journal file structure level 2. This new
51 0051 1 * format add a flag longword to each file entry to enable us
52 0052 1 * to flag the fact that only a file header was saved for a
53 0053 1 * particular file.
54 0054 1 *
55 0055 1 * V03-001 ACG0313 Andrew C. Goldstein, 12-Feb-1983 16:23
56 0056 1 * Add routine subtitles
57 0057 1 *
```

LISTJOUR  
V04-000

List a journal file

L 1  
16-Sep-1984 00:10:02 VAX-11 Bliss-32 V4.0-742  
14-Sep-1984 11:53:55 [BACKUP.SRC]LISTJOUR.B32;1

Page 2  
(1)

58 0058 1 | V02-002 MLJ0036 Martin L. Jack, 28-Aug-1981 17:38  
59 0059 1 | Change calling sequence to MATCH routine.  
60 0060 1 |  
61 0061 1 | V02-001 MLJ0025 Martin L. Jack, 8-May-1981 13:36  
62 0062 1 | Implement selective journal listing.  
63 0063 1 |  
64 0064 1 |  
65 0065 1 !\*\*

```
67 0066 1 REQUIRE 'SRC$:COMMON';
68 1172 1 LIBRARY 'SYSSLIBRARY:STARLET';
69 1173 1 REQUIRE 'LIB$:BACKDEF';
70 1623 1
71 1624 1
72 1625 1 LINKAGE L_PS = CALL: GLOBAL(P$=11);
73 1626 1
74 1627 1
75 1628 1
76 1629 1 MACRO L_DECL = EXTERNAL REGISTER P$ = 11: REF VECTOR %;
77 1630 1
78 1631 1
79 1632 1 FORWARD ROUTINE
80 1633 1 SELECT_FILE, ! Evaluate selection criteria
81 1634 1 LIST_JOURNAL: NOVALUE; ! Driver for journal file listing
82 1635 1
83 1636 1
84 1637 1
85 1638 1 EXTERNAL ROUTINE
86 1639 1 MATCH, ! Match file specifications
87 1640 1 OPEN_JOURNAL: NOVALUE, ! Open a journal file
88 1641 1 READ_JOURNAL, ! Read a journal record
89 1642 1 CLOSE_JOURNAL: NOVALUE, ! Close a journal file
90 1643 1 LIST_FA0: L_PS NOVALUE, ! Add information to line buffer
91 1644 1 LIST_EOL: L_PS NOVALUE: ! Write line buffer to listing file
92 1645 1
93 1646 1
94 1647 1 GSDEFINE(); ! Define global common area
95 1648 1
96 1649 1
97 1650 1 MACRO FA0_(A)=
98 M 1651 1
99 M 1652 1 LIST_FA0(
100 M 1653 1 OPLIT BYTE (%ASCIC A)
101 1654 1 %IF NOT %NULL(%REMAINING) %THEN , %FI %REMAINING) %.
102 1655 1
103 1656 1
104 M 1657 1 EOL_(A)=
105 1658 1 LIST_EOL() %;
106 1659 1
107 1660 1
108 1661 1 MACRO
109 1662 1 LIST_DESC= P$[0] %, ! Descriptor for buffer
110 1663 1 LIST_BUFFER= P$[2] %, ! Listing buffer
111 1664 1 LIST_DESC(N)= VECTOR[LIST_DESC,N] %;
112 1665 1
113 1666 1
114 1667 1 LITERAL P$SIZE= 2 + CH$ALLOCATION(LIST_SIZE);
115 1668 1
```

```
117 1669 1 %SBTTL 'SELECT_FILE - select file from journal'
118 1670 1 ROUTINE SELECT_FILE(NAME,CREDITATE)
119 1671 1 ++
120 1672 1
121 1673 1
122 1674 1 FUNCTIONAL DESCRIPTION:
123 1675 1 This routine evaluates the selection criteria for a file specification
124 1676 1 retrieved from a journal file.
125 1677 1
126 1678 1 INPUT PARAMETERS:
127 1679 1 NAME - Descriptor for file specification "[dir]nam.typ:ver".
128 1680 1 CREDITATE - Pointer to quadword time value.
129 1681 1
130 1682 1 IMPLICIT INPUTS:
131 1683 1 NONE
132 1684 1
133 1685 1 OUTPUT PARAMETERS:
134 1686 1 NONE
135 1687 1
136 1688 1 IMPLICIT OUTPUTS:
137 1689 1 NONE
138 1690 1
139 1691 1 ROUTINE VALUE:
140 1692 1 True if the file specification is selected, false otherwise.
141 1693 1
142 1694 1 SIDE EFFECTS:
143 1695 1 NONE
144 1696 1
145 1697 1 --
146 1698 1
147 1699 2 BEGIN
148 1700 2 MAP
149 1701 2 CREDITATE: REF VECTOR;
150 1702 2
151 1703 2
152 1704 2 BEFORE
153 1705 2
154 1706 2 IF .QUAL[QUAL_BEFO] AND NOT .QUAL[QUAL_BEFO_BACK]
155 1707 2 THEN
156 1708 2 BEGIN
157 1709 3 IF .CREDITATE[1] GTRU .VECTOR[QUAL[QUAL_BEFO_VALUE], 1] THEN RETURN FALSE;
158 1710 3 IF .CREDITATE[1] EQLU .VECTOR[QUAL[QUAL_BEFO_VALUE], 1] AND .CREDITATE[0] GEQU .VECTOR[QUAL[QUAL_BEFO_VALUE]
159 1711 2 END;
160 1712 2
161 1713 2 SINCE
162 1714 2
163 1715 2
164 1716 2 IF .QUAL[QUAL_SINC] AND NOT .QUAL[QUAL_SINC_BACK]
165 1717 2 THEN
166 1718 2 BEGIN
167 1719 3 IF .CREDITATE[1] LSSU .VECTOR[QUAL[QUAL_SINC_VALUE], 1] THEN RETURN FALSE;
168 1720 3 IF .CREDITATE[1] EQLU .VECTOR[QUAL[QUAL_SINC_VALUE], 1] AND .CREDITATE[0] LSSU .VECTOR[QUAL[QUAL_SINC_VALUE]
169 1721 2 END;
170 1722 2
171 1723 2
172 1724 2 EXCLUDE
173 1725 2
```

```
174 1726 2 IF .QUAL[QUAL_EXCL]
175 1727 2 THEN
176 1728 3 BEGIN
177 1729 3 LOCAL
178 1730 3 EXCL: REF BBLOCK;
179 1731 3
180 1732 3 EXCL = .QUAL[QUAL_EXCL_LIST];
181 1733 3 WHILE .EXCL NEQ 0 DO
182 1734 4 BEGIN
183 1735 4 IF MATCH(.NAME, EXCL[QUAL_EXCL_DESC]) THEN RETURN FALSE;
184 1736 4 EXCL = .EXCL[QUAL_NEXT];
185 1737 3 END;
186 1738 2 END;
187 1739 2
188 1740 2
189 1741 2 ! SELECT
190 1742 2
191 1743 2 IF .QUAL[QUAL_SELE]
192 1744 2 THEN
193 1745 3 BEGIN
194 1746 3 LOCAL
195 1747 3 SELE: REF BBLOCK;
196 1748 3
197 1749 3 SELE = .QUAL[QUAL_SELE_LIST];
198 1750 3 IF
199 1751 4 BEGIN
200 1752 4 WHILE .SELE NEQ 0 DO
201 1753 5 BEGIN
202 1754 5 IF MATCH(.NAME, SELE[QUAL_SELE_DESC]) THEN EXITLOOP FALSE;
203 1755 5 SELE = .SELE[QUAL_NEXT];
204 1756 5 END
205 1757 4 END
206 1758 3 THEN
207 1759 3 RETURN FALSE;
208 1760 2 END;
209 1761 2
210 1762 2
211 1763 2 TRUE
212 1764 1 END;
```

.TITLE LISTJOUR List a journal file  
.IDENT \V04-000\

.PSECT COMMON,NOEXE, OVR,2

00000 GLOBAL\_BASE: BLKB 0  
~00000 FREE\_LIST: BLKB 8  
00008 INPUT\_WAIT: BLKB 8  
00010 REREAD\_WAIT: BLKB 8  
00018 OUTPUT\_WAIT: BLKB 8  
00020 JPI\_UIC: BLKB 4

LISTJOUR  
V04-000

List a journal file  
SELECT\_FILE - select file from journal

C 2  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55

VAX-11 Bliss-32 v4.0-742  
[BACKUP.SRC]LISTJOUR.B32;1

Page 6  
(3)

00024 JPI\_USERNAME:  
.BLKB 12  
00030 JPI\_DATE:  
.BLKB 8  
00038 JPI\_NODE\_DESC:  
.BLKB 8  
00040 JPI\_CURPRIV:  
.BLKB 8  
00048 SYI\_VERSION:  
.BLKB 4  
0004C SYI\_SID:.BLKB 4  
00050 RWSV\_HOLD\_LIST:  
.BLKB 8  
00058 RWSV\_CRC16:  
.BLKB 64  
00098 RWSV\_AUTODIN:  
.BLKB 64  
000D8 RWSV\_FILESET\_ID:  
.BLKB 8  
000E0 RWSV\_VOLUME\_ID:  
.BLKB 12  
000EC RWSV\_VOL\_NUMBER:  
.BLKB 2  
000EE RWSV\_SEG\_NUMBER:  
.BLKB 2  
000F0 RWSV\_FILE\_NUMBER:  
.BLKB 4  
000F4 RWSV\_SAVE\_QUAL:  
.BLKB 4  
000F8 RWSV\_SAVE\_FAB:  
.BLKB 4  
000FC RWSV\_CHAN:  
.BLKB 4  
00100 RWSV\_XOR\_BCB:  
.BLKB 4  
00104 RWSV\_IN\_SEQ:  
.BLKB 4  
00108 RWSV\_IN\_SEQ\_0:  
.BLKB 4  
0010C RWSV\_IN\_XOR\_SEQ:  
.BLKB 4  
00110 RWSV\_IN\_XOR\_RFA:  
.BLKB 6  
00116 RWSV\_LOOKAHEAD:  
.BLKB 1  
00117 RWSV\_XORSIZE:  
.BLKB 1  
00118 RWSV\_IN\_GROUP\_SIZE:  
.BLKB 4  
0011C RWSV\_IN\_ERRORS:  
.BLKB 2  
0011E RWSV\_IN\_XORUSE:  
.BLKB 2  
00120 RWSV\_IN\_ORGERR:  
.BLKB 8  
00128 RWSV\_IN\_VBN:  
.BLKB 4

LISTJOUR  
V04-000

List a journal file  
SELECT\_FILE - select file from journal

D 2  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55

VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]LISTJOUR.B32;1

Page 7  
(3)

0012C RWSV\_IN\_VBN 0:  
.BLKB 4  
00130 RWSV\_ALLOC:  
.BLKB 4  
00134 RWSV\_EOF:  
.BLKB 4  
00138 RWSV\_OUT\_SEQ:  
.BLKB 4  
0013C RWSV\_OUT\_VBN:  
.BLKB 4  
00140 RWSV\_OUT\_BLOCK\_COUNT:  
.BLKB 4  
00144 RWSV\_OUT\_ERRORS:  
.BLKB 2  
00146 RWSV\_SEQ\_ERRORS:  
.BLKB 2  
00148 RWSV\_OUT\_GROUP\_COUNT:  
.BLKB 1  
00149 RWSV\_PADDING:  
.BLKB 3  
0014C QUAL: .BLKB 112  
001BC COM\_SSNAME:  
.BLKB 8  
001C4 COM\_VALID\_TYPES:  
.BLKB 2  
001C6 COM\_FLAGS:  
.BLKB 2  
001C8 COM\_PADDING:  
.BLKB 1  
001C9 COM\_BUFF\_COUNT:  
.BLKB 1  
001CA COM\_I\_SETCOUNT:  
.BLKB 1  
001CB COM\_O\_SETCOUNT:  
.BLKB 1  
001CC COM\_I\_STRUCNAME:  
.BLKB 12  
001DB COM\_O\_STRUCNAME:  
.BLKB 12  
001E4 COM\_O\_BSRTDATE:  
.BLKB 8  
001EC ALT\_SSNAME:  
.BLKB 32  
0020C INPUT\_FUNC:  
.BLKB 1  
0020D INPUT\_RTYPE:  
.BLKB 1  
0020E OUTPUT\_FUNC:  
.BLKB 1  
0020F FAST\_STRUCLEV:  
.BLKB 1  
00210 INPUT\_BEG:  
.BLKB 0  
00210 INPUT\_CHAN:  
.BLKB 4  
00214 INPUT\_FLAGS:  
.BLKB 2

LISTJOUR  
V04-000

List a journal file  
SELECT\_FILE - select file from journal

E 2  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55

VAX-11 Bliss-32 v4.0-742  
[BACKUP.SRC]LISTJOUR.B32;1

Page 8  
(3)

00216 INPUT\_PADDING: .BLKB 2  
00218 INPUT\_FAB: .BLKB 4  
0021C INPUT\_NAM: .BLKB 4  
00220 INPUT\_BCB: .BLKB 4  
00224 INPUT\_QUAL: .BLKB 4  
00228 INPUT\_BAD: .BLKB 4  
0022C INPUT\_BLOCK: .BLKB 4  
00230 INPUT\_MAXBLOCK: .BLKB 4  
00234 INPUT\_MEDIA\_ID: .BLRB 4  
00238 INPUT\_NAMEDESC: .BLKB 8  
00240 INPUT\_STATBLK: .BLKB 8  
00248 INPUT\_HDR\_BEG: .BLKB 0  
00248 INPUT\_CREDATE: .BLKB 8  
00250 INPUT\_REVDATE: .BLKB 8  
00258 INPUT\_EXPDATE: .BLKB 8  
00260 INPUT\_BAKDATE: .BLKB 8  
00268 INPUT\_FILEOWNER: .BLKB 4  
0026C INPUT\_FILECHAR: .BLKB 4  
00270 INPUT\_RECATTR: .BLKB 32  
00290 INPUT\_HDR\_END: .BLKB 0  
00290 INPUT\_END: .BLKB 0  
00290 INPUT\_PROC\_LIST: .BLKB 4  
00294 INPUT\_PLACEMENT: .BLKB 8  
0029C INPUT\_VBN\_LIST: .BLKB 8  
002A4 INPUT\_PLACE\_LEN: .BLRB 2  
002A6 INPUT\_PADDING\_2: .BLKB 2  
002A8 OUTPUT\_BEG: .BLKB 0  
002A8 OUTPUT\_CHAN: .BLKB 4  
002AC OUTPUT\_FLAGS:

LISTJOUR  
V04-000

List a journal file  
SELECT\_FILE - select file from journal

F 2  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55

VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]LISTJOUR.B32:1

Page 9  
(3)

002AE OUTPUT\_PADDING: .BLKB 2  
002B0 OUTPUT\_FAB: .BLKB 2  
002B4 OUTPUT\_NAM: .BLKB 4  
002B8 OUTPUT\_BCB: .BLKB 4  
002BC OUTPUT\_QUAL: .BLKB 4  
002C0 OUTPUT\_BAD: .BLKB 4  
002C4 OUTPUT\_BLOCK: .BLKB 4  
002CB OUTPUT\_MAXBLOCK: .BLKB 4  
002CC OUTPUT\_DEVGEOM: .BLKB 8  
002D4 OUTPUT\_ATTBUF: .BLKB 144  
00364 OUTPUT\_END: .BLKB 0  
00364 LIST\_TOTFILES: .BLKB 4  
00368 LIST\_TOTSIZE: .BLKB 4  
0036C VERIFY\_FAB: .BLKB 4  
00370 VERIFY\_USE\_COUNT: .BLKB 4  
00374 VERIFY\_QUAL: .BLKB 4  
00378 COMPARE\_BCB: .BLKB 4  
0037C FAST\_BUFFER: .BLKB 4  
00380 FAST\_BUFFER\_SIZE: .BLKB 4  
00384 FAST\_RVN: .BLKB 1  
00385 FAST\_PADDING: .BLKB 1  
00386 DIR\_VERLIMIT: .BLKB 2  
00388 FAST\_VOL\_BEG: .BLKB 0  
00388 FAST\_IMAP\_SIZE: .BLKB 4  
0038C FAST\_IMAP: .BLKB 4  
00390 FAST\_HDR\_OFFSET: .BLKB 4  
00394 FAST\_BOOT\_LBN: .BLKB 4  
00398 FAST\_VOL\_END: .BLKB 0

LISTJOUR  
V04-000

List a journal file  
SELECT\_FILE - select file from journal

6 2  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55  
00398 JOUR\_BUFFER:  
0039C JOUR\_DIR:  
003A0 JOUR\_HIBLK:  
003A4 JOUR\_EFBLK:  
003AB JOUR\_INBLK:  
003AC JOUR\_FFBYTE:  
003AE JOUR\_INBYTE:  
003B0 JOUR\_STRUCTLEV:  
003B2 JOUR\_COUNT:  
003B3 JOUR\_REVERSE:  
003B4 JOUR\_EXSZ:  
003B6 JOUR\_PADDING:  
003B8 CHKPT\_HIGHSP:  
003BC CHKPT\_LOWSP:  
003C0 CHKPT\_STACK:  
003C4 CHKPT\_VARS:  
003C8 CHKPT\_STATUS:  
003CC DIR\_BEG:  
003CC DIR\_CHAN:  
003D0 DIR\_NAM:  
003D4 DIR\_DEV\_DESC:  
003DB DIR\_SEL\_DIR:  
003E0 DIR\_SEL\_NTV:  
003E8 DIR\_STRUCTLEV:  
003E9 DIR\_LEVELS:  
003EA DIR\_FLAGS:  
003EB DIR\_STATUS:  
003EC DIR\_STRING:  
0052C DIR\_STACK:  
00790 DIR\_SP:

VAX-11 Bliss-32 v4.0-742  
[BACKUP.SRC]LISTJOUR.B32:1

Page 10  
(3)

00794 DIR\_SEL\_LATEST:  
 .BLKB 4  
 00798 DIR-END:.BLKB 0  
 00798 DIR\_SCANLIMIT:  
 .BLKB 36  
 007BC INPUT\_MTL:  
 .BLKB 4  
 007C0 OUTPUT\_MTL:  
 .BLKB 4  
 007C4 CURRENT\_MTL:  
 .BLKB 4  
 007C8 CURRENT\_VCB:  
 .BLKB 4  
 007CC CURRENT\_WCB:  
 .BLKB 4  
 007D0 ACL\_FIB\_DESCR:  
 .BLKB 8  
 007D8 ACL\_FIB:.BLKB 64  
 00818 ACL\_LENGTH:  
 .BLKB 4  
 0081C ACL\_BUFFER:  
 .BLKB 4  
 00820 CRYP\_IN\_CONTEXT:  
 .BLKB 4  
 00824 CRYP\_OUT\_CONTEXT:  
 .BLKB 4  
 00828 CRYP\_DA\_CONTEXT:  
 .BLKB 4  
 0082C CRYP\_DATA\_ENCIV:  
 .BLKB 8  
 00834 CRYP\_DATA\_CODE:  
 .BLKB 4  
 00838 CRYP\_DATA\_KEY:  
 .BLKB 8  
 00840 CRYP\_DATA\_IV:  
 .BLKB 8  
 00848 CRYP\_DATA\_CKSM:  
 .BLKB 4

.EXTRN MATCH, OPEN\_JOURNAL  
 .EXTRN READ\_JOURNAL, CLOSE\_JOURNAL  
 .EXTRN LIST\_FAQ, LIST\_EOL

.PSECT CODE,NOWRT,2

			001C 00000 SELECT_FILE:			
17 13  0C  0B	54  53  63  63  50  08  04   0B  A3	00000000G  00000000      A3	00 9E 00002	.WORD	Save R2,R3,R4	1670  1706  1709  1710
			EF 9E 00009	MOVAB	MATCH, R4	
			02 E1 00010	MOVAB	QUAL+8, R3	
			03 E0 00014	BBC	#2. QUAL+8, 1\$	
			AC D0 00018	BBS	#3. QUAL+8, 1\$	
			A0 D1 0001C	MOVL	CRÉDATE, R0	
			5D 1A 00021	CMPL	4(R0), QUAL+20	
			06 12 00023	BGTRU	6\$	
			60 D1 00025	BNEQ	1\$	
			55 1E 00029	CMPL	(R0), QUAL+16	
	BGEQU	6\$				

LISTJOUR  
V04-000List a journal file  
SELECT\_FILE - select file from journal1 2  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55  
VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]LISTJOUR.B32:1Page 12  
(3)

18	05	A3	04	E1	00028	18:	BBC	#6, QUAL+13, 2\$	: 1716	
13	05	A3	05	E0	00030		BBS	#5, QUAL+13, 2\$		
	50		08	AC	00035		MOVL	CRÉDATE, R0		
1C	A3		04	A0	00039		CMPL	4(R0), QUAL+36		
			40	1F	0003E		BLSSU	6\$		
			06	12	00040		BNEQ	2\$		
18	A3		60	D1	00042		CMPL	(R0), QUAL+32		
			38	1F	00046		BLSSU	6\$		
17	01	A3	04	E1	00048	28:	BBC	#4, QUAL+9, 4\$		
	52		28	A3	00040		MOVL	QUAL+48, EXCL		
				11	13	38:	BEQL	4\$		
			04	A2	9F	00053	PUSHAB	4(EXCL)		
			04	AC	DD	00056	PUSHL	NAME		
	64			02	FB	00059	CALLS	#2, MATCH		
	21			50	EB	0005C	BLBS	R0, 6\$		
	52			62	DD	0005F	MOVL	(EXCL), EXCL		
				ED	11	00062	BRB	3\$		
1A	05	A3	03	E1	00064	48:	BBC	#3, QUAL+13, 7\$		
	52		3C	A3	00069		MOVL	QUAL+68, SELE		
			11	13	00060	58:	BEQL	6\$		
			04	A2	9F	0006F	PUSHAB	4(SELE)		
			04	AC	DD	00072	PUSHL	NAME		
	64			02	FB	00075	CALLS	#2, MATCH		
	08			50	EB	00078	BLBS	R0, 7\$		
	52			62	DD	0007B	MOVL	(SÉLE), SELE		
				ED	11	0007E	BRB	5\$		
				50	D4	00080	68:	CLRL	R0	
				04	00082		RET			
	50		01	DD	00083	78:	MOVL	#1, R0		
				04	00086		RET			

; Routine Size: 135 bytes, Routine Base: CODE + 0000

```
1765 1 %SBTTL 'LIST JOURNAL - main journal list routine'  
1766 1 GLOBAL ROUTINE LIST_JOURNAL: NOVALUE=  
1767 1 !--  
1768 1 !++  
1769 1  
1770 1 FUNCTIONAL DESCRIPTION:  
1771 1 This routine is the driver for listing of a journal file.  
1772 1  
1773 1 INPUT PARAMETERS:  
1774 1 NONE  
1775 1  
1776 1 IMPLICIT INPUTS:  
1777 1 NONE  
1778 1  
1779 1 OUTPUT PARAMETERS:  
1780 1 NONE  
1781 1  
1782 1 IMPLICIT OUTPUTS:  
1783 1 NONE  
1784 1  
1785 1 ROUTINE VALUE:  
1786 1 NONE  
1787 1  
1788 1 SIDE EFFECTS:  
1789 1 NONE  
1790 1  
1791 1 !--  
1792 1  
1793 2 BEGIN  
1794 2 LITERAL  
1795 2 STR_LENGTH = %CHARCOUNT(' file header only').  
1796 2 BUFFER_LENGTH = BJLSC_DIR_LEN + BJL$S_FILENAME + STR_LENGTH ;  
1797 2  
1798 2  
1799 2 LOCAL  
1800 2 STR:  
1801 2 FAB:  
1802 2 BUFFER:  
1803 2 SSNAME_LEN:  
1804 2 SSNAME:  
1805 2 VOLUME:  
1806 2 DIR_LEN:  
1807 2 DIRECTORY:  
1808 2 CHANGE,  
1809 2 PSAREA:  
1810 2 GLOBAL REGISTER  
1811 2 PS = 11:  
1812 2  
1813 2  
1814 2 ! Initialize impure area.  
1815 2  
1816 2 PS = PSAREA;  
1817 2 LIST_DESC[0] = LIST_SIZE;  
1818 2 LIST_DESC[1] = _LIST_BUFFER;  
1819 2  
1820 2  
1821 2 ! Do the listing.
```

```
271      1822 2 !  
272      1823 2 OPEN_JOURNAL(FALSE, FALSE);  
273      1824 2  
274      1825 2  
275      1826 2 ! Heading.  
276      1827 2  
277      1828 2 FAB = .QUAL[QUAL_JOUR FC];  
278      P 1829 2 FAO_('Journal file !AD on !%D',  
279      P 1830 2     .BBLOCK[FAB[FC_NAM], NAMSB_RSL],  
280      P 1831 2     .BBLOCK[FAB[FC_NAM], NAMSL_RSA],  
281      1832 2     0);  
282      1833 2  
283      1834 2  
284      1835 2  
285      1836 2 ! Read all records of the journal file to produce the listing.  
286      1837 2  
287      1838 2 CHANGE = FALSE;  
288      1839 2 WHILE READ_JOURNAL(BUFFER) DO  
289      1840 3     BEGIN  
290      1841 3     CASE .BUFFER[BJLSB_TYPE] FROM BJLSK_SSNAME TO BJLSK_FILE OF  
291      1842 3     SET  
292      1843 3  
293      1844 3  
294      1845 3     [BJLSK_SSNAME]:  
295      1846 4     BEGIN  
296      1847 4  
297      1848 4     ! Save the SSNAME record in a local.  
298      1849 4  
299      1850 4     IF .BUFFER[BJLSB_SIZE] LEQU BJLSC_SSNAME_LEN+1  
300      1851 4     THEN  
301      1852 5     BEGIN  
302      1853 5     SSNAME_LEN = .BUFFER[BJLSB_SIZE] - 1;  
303      1854 5     CHSMOVE(.SSNAME_LEN, BUFFER[BJLSB_DATA], SSNAME);  
304      1855 5     CHANGE = TRUE;  
305      1856 4     END;  
306      1857 3  
307      1858 3  
308      1859 3  
309      1860 3     [BJLSK_VOLUME]:  
310      1861 4     BEGIN  
311      1862 4  
312      1863 4     ! Save the VOLUME record in a local.  
313      1864 4  
314      1865 4     IF .BUFFER[BJLSB_SIZE] EQLU BJLSC_VOLUME_LEN+1  
315      1866 4     THEN  
316      1867 5     BEGIN  
317      1868 5     CHSMOVE(BJLSC_VOLUME_LEN, BUFFER[BJLSB_DATA], VOLUME);  
318      1869 5     CHANGE = TRUE;  
319      1870 4     END;  
320      1871 3  
321      1872 3  
322      1873 3  
323      1874 3     [BJLSK_DIRECTORY]:  
324      1875 4     BEGIN  
325      1876 4  
326      1877 4     ! Save the DIRECTORY record in a local.  
327      1878 4
```

```
328    1879 4      IF .BUFFER[BJL$B_SIZE] LEQU BJL$C_DIR_LEN+1
329    1880 4      THEN
330    1881 5      BEGIN
331    1882 5      DIR_LEN = .BUFFER[BJL$B_SIZE] - 1;
332    1883 5      CHSMOVE(.DIR_LEN, BUFFER[BJL$B_DATA], DIRECTORY);
333    1884 4      END;
INFO#252
Test expression is always true
334    1885 5      L1:1879
335    1886 5      END;
336    1887 5
337    1888 5      [BJLSK FILE]:
338    1889 4      BEGIN
339    1890 4      LOCAL
340    1891 4      BUFF_SIZE : WORD
341    1892 4      BUFF_FLAGS : BBLOCK[4]
342    1893 4      NAME_DESC : VECTOR[2]; ! Descriptor for name string
343    1894 4
344    1895 4
345    1896 4      BUFF_SIZE = .BUFFER [ BJL$B_SIZE ];
346    1897 4
347    1898 4      IF .JOUR_STRUCT_LEVEL GTRU BJLSK_LEVEL1
348    1899 4      THEN
349    1900 5      BEGIN
350    1901 5      ! Adjust the name size to remove the flag longword
351    1902 5
352    1903 5      BUFF_SIZE = .BUFF_SIZE - 4 ;
353    1904 5
354    1905 5
355    1906 5
356    1907 5      ! Get the flags longword ( size +1 to skip size field )
357    1908 5      BUFF_FLAGS = .BUFFER [.BUFF_SIZE+1,0,32,0] ;
358    1909 4
359    1910 4      END
360    1911 4
361    1912 4      ELSE
362    1913 4      BUFF_FLAGS = 0 ;
363    1914 4
364    1915 4      ! Assemble the complete name string.
365    1916 4      NAME_DESC[1] = BUFFER[0,0,0,0];
366    1917 4      NAME_DESC[0] = .BUFF_SIZE
367    1918 4      - 1           ! Adjust for size field
368    1919 4      + DIR_LEN    ! Add in directory name length
369    1920 4      + 2 ;        ! Adjust for '['
370    1921 4
371    1922 4      CHSCOPY(
372    1923 4      .BUFF_SIZE - 1,
373    1924 4      BUFFER[BJL$B_DATA],
374    1925 4      %C',
375    1926 4      BUFFER + BUFFER_LENGTH - BUFFER[.DIR_LEN+2,0,0,0],
376    1927 4      BUFFER[.DIR_LEN+2,0,0,0]);
377    1928 4      CHSMOVE(
378    1929 4      .DIR_LEN,
379    1930 4      DIRECTORY,
380    1931 4      BUFFER[1,0,0,0]);
381    1932 4      BUFFER[0,0,8,0] = %C '[';
382    1933 4      BUFFER[.DIR_LEN+1,0,8,0] = %C ']';
IF .BUFF_FLAGS[BJL$V_READONLY]
```

```
383 1934 4      THEN
384 1935 5      BEGIN
385 1936 5      CHSCOPY ( STR_LENGTH,
386 1937 5      .STR,
387 1938 5      %C'
388 1939 5      BUFFER_LENGTH - .NAME_DESC[0],
389 1940 5      BUFFER[.NAME_DESC[0],0,8,0];
390 1941 5      NAME_DESC[0] = .NAME_DESC[0] + STR_LENGTH ;
391 1942 4      END;
392 1943 4
393 1944 4      ! Write the name string, if the selection criteria are satisfied.
394 1945 4
395 1946 4      IF SELECT_FILE(NAME_DESC, SSNAME[BJL$Q_CREDIT])
396 1947 4      THEN
397 1948 5      BEGIN
398 1949 5
399 1950 5      ! If the save set or the volume number has changed since the
400 1951 5      last line, write the new information.
401 1952 5
402 1953 5      IF .CHANGE
403 1954 5      THEN
404 1955 6      BEGIN
405 1956 6      EOL();
406 1957 6      FAO_(
407 1958 6      'Save set !AD created on !ZD'
408 1959 6      .SSNAME_LEN - $BYTEOFFSET(BJL$T_SSNAME),
409 1960 6      SSNAME[BJL$T_SSNAME],
410 1961 6      SSNAME[BJL$Q_CREDIT]);
411 1962 6
412 1963 6      EOL();
413 1964 6      FAO_(
414 1965 6      'Volume number !UW, volume label !AD',
415 1966 6      .VOLUME[BJL$W_VOLNUMBER],
416 1967 6      BJL$S_VOLNAME,
417 1968 6      (IF .VOLUME[BJL$T_VOLNAME]<0,8> GTRU %C'
418 1969 6      THEN VOLUME[BJL$T_VOLNAME]
419 1970 6      ELSE UPLIT BYTE ("Unknown      "));
420 1971 6      EOL();
421 1972 5      CHANGE = FALSE;
422 1973 5
423 1974 5
424 1975 5      ! Write the file specification.
425 1976 5      FAO_('!AS', NAME_DESC);
426 1977 5      EOL();
427 1978 5      END;
428 1979 4
429 1980 3      END;
430 1981 3
431 1982 3
432 1983 3      [INRANGE, OUTRANGE];
433 1984 3      0;
434 1985 3
435 1986 3
436 1987 2      TES;
437 1988 2      END;
438 1989 2      CLOSE_JOURNAL(FALSE);
439 1990 1      END;
```

6E	6F	20	72	65	64	61	65	68	20	65	6C	69	66	20	00087	P.AAA:	.ASCII	\ file header only\
21	20	65	6C	69	66	20	6C	61	6E	72	75	6F	4A	17	00096	P.AAB:	.ASCII	<23>\Journal file !AD on !ZD\
63	20	44	41	21	20	74	65	73	20	65	76	61	53	1B	00098	P.AAC:	.ASCII	<27>\Save set !AD created on !ZD\
20	72	65	62	60	75	6E	20	65	60	75	6C	6F	56	23	000B0	P.AAD:	.ASCII	\#Volume number !UW, volume label !AD\
62	61	6C	20	65	60	75	6C	6F	76	20	2C	57	55	21	000BF	P.AAE:	.ASCII	\unknow\
									44	41	21	20	6C	65	000EA	P.AAF:	.ASCII	<7>\ !AS\
								20	20	20	20	53	41	21	000FO	P.AAA:	.ASCII	\unknow\
														000FC	P.AAF:	.ASCII	<7>\ !AS\	

		56	FE70	CD 9A 0009A	7\$: MOVZBL BUFFER, DIR_LEN	1882
0110	CE	FE72	CD	56 D7 0009F	DECL DIR_LEN	1883
				56 28 000A1	MOVC3 DIR_LEN, BUFFER+2, DIRECTORY	1841
				A2 11 000A9	BRB 1\$	1896
0101	51	FE70	CD 9B 000AB	8\$: MOVZBW BUFFER, BUFF_SIZE	1898	
	8F 00000000		EF B1 000B0	CMPW JOUR_STRUCT_EV, #257		
				10 1B 000B9	BLEQU 9\$	
				04 A2 000BB	SUBW2 #4, BUFF_SIZE	1903
	50		CD 9C 000BE	51 3C 000BE	MOVZWL BUFF_SIZE, R0	1907
			FE71 CD40	9F 000C1	PUSHAB BUFFER+1[R0]	
	58			9E D0 000C6	MOVL a(SP)+, BUFF_FLAGS	
				02 11 000C9	BRB 10\$	1898
	04	AE	FE70	58 D4 000CB	CLRL BUFF_FLAGS	1910
				CD 9E 000CD	MOVAB BUFFER, NAME_DESC+4	1914
	50			51 3C 000D3	MOVZWL BUFF_SIZE, R0	1916
	6E		01 A640	9E 000D6	MOVAB 1(DIR_LEN)[R0], NAME_DESC	1918
				50 D7 000DB	DECL R0	1921
	51			6D 9E 000DD	MOVAB BUFFER+400, R1	1924
	52		FE72 CD46	9E 000E0	MOVAB BUFFER+2[DIR_LEN], R2	
	51			52 C2 000E6	SUBL2 R2, R1	
51	20	FE72	CD	50 2C 000E9	MOVCS R0, BUFFER+2, #32, R1, (R2)	1925
				62 000F0		
	FE71	CD	0110 CE	56 28 000F1	MOVC3 DIR_LEN, DIRECTORY, BUFFER+1	1929
			FE70 CD	8F 90 000F9	MOVB #91, BUFFER	1930
			FE71 CD46	5D 8F 000FF	MOVB #93, BUFFER+1[DIR_LEN]	1931
			18	58 E9 00106	BLBC BUFF_FLAGS, 11\$	1933
	51 00000190	8F		6E C3 00109	SUBL3 NAME_DESC, #400, R1	1939
		50	FE70	CD 9E 00111	MOVAB BUFFER, R0	1940
51	20	6A		11 2C 00116	MOVCS #17, (STR), #32, R1, &NAME_DESC[R0]	
			00 BE40	0011B		
		6E		11 C0 0011E	ADDL2 #17, NAME_DESC	1941
			FE48	CD 9F 00121	11\$: PUSHAB SSNAME	1946
		04	AE	9F 00125	PUSHAB NAME_DESC	
	FDCF	CF		02 FB 00128	CALLS #2, SELECT_FILE	
	6B			50 E9 0012D	BLBC R0, 15\$	
	54			57 E9 00130	BLBC CHANGE, 14\$	1953
	00000000G	00		00 FB 00133	CALLS #0, LIST_EOL	1956
			FE48	CD 9F 0013A	PUSHAB SSNAME	1961
			FE50	CD 9F 0013E	PUSHAB SSNAME+8	
			F8	A9 9F 00142	PUSHAB -8(SSNAME_LEN)	
			FE63	CF 9F 00145	PUSHAB P.AAC	
	00000000G	00		04 FB 00149	CALLS #4, LIST_FA0	
	00000000G	00		00 FB 00150	CALLS #0, LIST_EOL	1962
		20	FE38	CD 91 00157	CMPB VOLUME, #32	1969
				07 1B 0015C	BLEQU 12\$	
		50	FE38	CD 9E 0015E	MOVAB VOLUME, R0	
				05 11 00163	BRB 13\$	
		50	FE83	CF 9E 00165	12\$: MOVAB P.AAE, R0	
				50 DD 0016A	13\$: PUSHL R0	
				0C DD 0016C	PUSHL #12	
		7E	FE44	CD 3C 0016E	MOVZWL VOLUME+12, -(SP)	
	00000000G	00		CF 9F 00173	PUSHAB P.AAD	
	00000000G	00		04 FB 00177	CALLS #4, LIST_FA0	1970
				00 FB 0017E	CALLS #0, LIST_EOL	1971
				57 D4 00185	CLRL CHANGE	
				5E DD 00187	PUSHL SP	1977
			FE6B	CF 9F 00189	PUSHAB P.AAF	
				14\$:		

LISTJOUR  
V04-000

List a journal file  
LIST\_JOURNAL - main journal list routine

C 3  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55  
VAX-11 Bliss-32 V4.0-742  
[BACKUP.SRC]LISTJOUR.B32;1

Page 19  
(4)

00000000G 00	02 FB 00180	CALLS	#2, LIST_FAQ
00000000G 00	00 FB 00194	CALLS	#0, LIST_EOL
	FEAF 31 0019B 15\$:	BRW	1\$
	7E D4 0019E 16\$:	CLRL	-(SP)
00000000G 00	01 FB 001A0	CALLS	#1, CLOSE_JOURNAL
	04 001A7	RET	

; 1978  
; 1839  
; 1989  
; 1990

; Routine Size: 424 bytes, Routine Base: CODE + 0104

LISTJOUR  
V04-000

List a journal file  
LIST\_JOURNAL - main journal list routine

0 3  
16-Sep-1984 00:10:02  
14-Sep-1984 11:53:55

VAX-11 Bliss-32 v4.0-742  
[BACKUP.SRC]LISTJOUR.B32;1

Page 20  
(5)

: 441 1991 1 END  
: 442 1992 0 ELUDOM

#### PSECT SUMMARY

Name	Bytes	Attributes
COMMON CODE	2124 NOVEC, WRT, RD ,NOEXE,NOSHR, LCL, REL, OVR,NOPIC,ALIGN(2)	
	684 NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)	

#### Library Statistics

File	-----	Symbols	-----	Pages	Processing
	Total	Loaded	Percent	Mapped	Time
\$_\$255\$DUA28:[SYSLIB]STARLET.L32;1	9776	6	0	581	00:01.1

: Information: 1  
: Warnings: 0  
: Errors: 0

#### COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LISS:LISTJOUR/OBJ=OBJ\$:LISTJOUR MSRC\$:LISTJOUR/UPDATE=(ENH\$:LISTJOUR)

: Size: 559 code + 2249 data bytes  
: Run Time: 00:23.3  
: Elapsed Time: 01:21.8  
: Lines/CPU Min: 5120  
: Lexemes/CPU-Min: 45974  
: Memory Used: 313 pages  
: Compilation Complete

0012 AH-BT13A-SE  
VAX/VMS V4.0

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